

What is claimed is:

1. A mechanical locking device for mechanically connected contactors (2a; 2b) comprising
  - actuating members (8a; 8b) which move in a direction parallel to the connecting sidewalls (4a; 4b) and are operatively connected, on the one hand, to electromagnetic operating mechanisms, and, on the other hand, to movable contacts,
  - facing openings (6a; 6b) in the connecting sidewalls (4a; 4b) for a locking element (14), and
  - recesses (12a; 12b) in the actuating members (8a; 8b); the actuating member (8a or 8b) of the switched-on contactor (2a or 2b) pushing the locking element (14) into the recess (12b or 12a) of the respective other contactor (2a or 2b),wherein
  - the recesses (12a; 12b) are shaped in the form of spherical caps and located closely next to the connecting sidewalls (4a; 4b); and
  - the locking element (14) in the form of a rolling element rests in the openings (6a; 6b).
2. The locking device as recited in Claim 1,  
wherein the recesses (12a; 12b) are shaped in the form of a spherical segment and the locking element (14) takes the form of a ball.
3. The locking device as recited in Claim 1,  
wherein the recesses (12a; 12b) are shaped in the form of a cylindrical segment and the locking element (14) takes the form of a cylindrical roller.
4. The locking device as recited in Claim 1,  
wherein the recesses (12a; 12b) are shaped in the form of a barrel segment and the locking element (14) takes the form of a barrel-shaped roller.
5. The locking device as recited in Claim 1,  
wherein the recesses (12a; 12b) are shaped in the form of a disk segment and the locking element (14) takes the form of a disk.

6. An auxiliary tool for holding and inserting a locking element (14) into facing openings (6a; 6b) in initially only slightly spaced apart connecting sidewalls (4a; 4b) of contactors (2a; 2b) to be mechanically locked, which include actuating members (8a; 8b) which move in a direction parallel to the connecting sidewalls (4a; 4b) and are operatively connected, on the one hand, to electromagnetic operating mechanisms, and, on the other hand, to movable contacts, and which further include recesses (12a; 12b) in the actuating members (8a; 8b); the actuating member (8a or 8b) of the switched-on contactor (2a or 2b) pushing the locking element (14) into the recess (12b or 12a) of the respective other contactor (2a or 2b),  
wherein
- the locking device (14) takes the form of a rolling element, and the recesses (12a; 12b) are shaped in the form of spherical caps and located closely next to the connecting sidewalls (4a; 4b),
  - the elongated flat auxiliary tool (20) takes the form of an elastic fork at the end (21) and, together with the fork slot (30) adapted to the shape of the locking element (14), forms a receiving space (28) for elastically holding the locking element (14); the received locking element (14) protruding above the flat sides (24) with part of its surface that faces the connecting sidewalls (4a; 4b).
7. The auxiliary tool as recited in the preceding claim,  
wherein both ends (21) are designed to receive a locking element (14).